

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1.-16. (cancelled)

17. (original) A composite structure comprising, in order:

a substrate;

a polymeric layer including a first polymeric material selected from the group consisting of polyimides, polyolefins, polyepoxides, polyurethanes, and polycarbonates;

a silicon-oxide containing layer; and

an added layer including a second polymeric material selected from the group consisting of polyimides, polyolefins, polyepoxides, polyurethanes, and polycarbonates.

18. (original) The structure of claim 17 in which the first polymeric material is a polyimide.

19. (original) The structure of claim 18 in which the second polymeric material is a polyimide.

20. (currently amended) The structure of claim ~~19~~ 18 in which the substrate is an integrated circuit device and the second polymeric material is a polyepoxide.

21. (original) The structure of claim 20 additionally comprising a chip carrier adjacent to the added layer.

22. (original) The structure of claim 17 additionally comprising a layer of adhesion promoter between the silicon-oxide containing layer and the added layer.

23. (original) The structure of claim 22 in which the adhesion promoter is selected from the group consisting of 3-amino-propyl-tri-ethoxy-silane, 3-glycidoxy-propyl-tri-methoxy-silane, N-(2-amino-ethyl)-3-amino-propyl-tri-ethoxy-silane, 3-amino-propyl-tri-methoxy-silane, N-(2-amino-ethyl)-3-amino-propyl-tri-methoxy-silane, 3-isocyanato-propyl-tri-ethoxy-silane, 10-amino-decyl-tri-methoxy-silane, 11-amino-undecyl-tri-methoxy-silane, n-propyl-tri-methoxy-silane, and phenyl-tri-methoxy-silane.

24. (original) The structure of claim 23 in which the first polymeric material is a polyimide.

25. (currently amended) A structure formed by the steps of:

(a) forming a doped layer over a substrate, the doped layer comprising (1) an organo-silicon compound and (2) either a first polymeric material or a first precursor composition that can be converted to ~~a~~ the first polymeric material after the doped layer has been applied, the doped layer having an outer surface and an inner surface, the inner surface facing the substrate;

(b) heating the doped layer and forming an organo-silicon-rich layer on the outer surface of the doped layer;

(c) converting the organo-silicon-rich layer to a silicon oxide-containing layer;
and

(d) forming an added layer over the silicon oxide-containing layer, the added layer comprising either a second polymeric material or a second precursor composition that can be converted to ~~a~~ the second polymeric material after the added layer has been applied to the silicon oxide-containing layer.

26. (original) The structure of claim 25 in which the added layer comprises a polyimide precursor composition and the method additionally comprises, after step (d), the step of heating the added layer to form a polyimide-containing layer.

27. (original) The structure of claim 25 in which the substrate is an integrated circuit device and the doped layer comprises a polyimide precursor composition.

28. (original) The structure of claim 27 in which the second precursor composition is a liquid that comprises an epoxy compound, a hardener, and particles of a thermally conductive and electrically insulating material, and the method additionally comprises, after step (d), the step of heating the added layer to form a polyepoxide.

29. (original) The structure of claim 25 in which the method additionally comprises, after step (c) and before step (d), the step of applying a layer of adhesion promoter over the silicon oxide-containing layer.

30. (original) The structure of claim 29 in which the adhesion promoter is selected from the group consisting of 3-amino-propyl-tri-ethoxy-silane, 3-glycidoxy-propyl-tri-methoxy-silane, N-(2-amino-ethyl)-3-amino-propyl-tri-ethoxy-silane, 3-amino-propyl-tri-methoxy-silane, N-(2-amino-ethyl)-3-amino-propyl-tri-methoxy-silane, 3-isocyanato-propyl-tri-ethoxy-silane, 10-amino-decyl-tri-methoxy-silane, 11-amino-undecyl-tri-methoxy-silane, n-propyl-tri-methoxy-silane, and phenyl-tri-methoxy-silane.

31.-32. (cancelled)

33. (new) The structure of claim 25 in which the organo-silicon compound is a polysiloxane.

34. (new) The structure of claim 26 in which the organo-silicon compound is a polysiloxane.

35. (new) The structure of claim 29 in which the organo-silicon compound is a polysiloxane.